

MEMORANDUM

TO: Vermont Children's Performance Indicator Project Advisory Group

FROM: John Pandiani
Lisa Gauvin
Brad James

DATE: October 16, 1997

RE: Correctional Involvement of Children's Services Clients

This is the first in a series of weekly Kids' PIP reports that will deal with a variety of outcome oriented performance measures. This report presents the results of an analysis that was designed to provide information about criminal justice involvement subsequent to treatment in community mental health Children's Services Programs.

As a result of discussion of this indicator at the PIP advisory group meeting last week, the findings are presented in three different ways. First, the findings are presented in our standard weekly format (except that regions are now ordered by children and adolescent populations). Second, the graphic presentation is presented in a somewhat different format. Finally, a one page version of the presentation that was originally prepared for the group that raised this question is enclosed for your consideration.

Please, give us your feedback on the effectiveness of these various forms of presentation as well as your comments on the quality of the data, the appropriateness of the analysis, and potential interpretations of the results.

Correctional Involvement of Former Children's Services Clients

QUESTION: How many children and adolescents who are served by Children's Services Programs at Community Mental Health Centers in Vermont become involved with state correctional programs subsequent to treatment? Do the rates of correctional involvement for Children's Services clients vary among regions in the state?

DATA: Two data sets were used in this analysis. The Quarterly Service Report (QSR) database maintained by the Vermont Department of Developmental and Mental Health Services (DDMHS) includes basic demographic and clinical information for all clients served by community service programs. The Correctional Facilities database maintained by the Vermont Department of Corrections includes basic demographic data and information on the offenses of people who spent time in community corrections facilities, local lockups, and work camps in the state as well as people who were on probation or parole. The Correctional Facilities database includes unique person identifiers and the QSR database includes clinic specific unique person identifiers but there is no unique person identifier shared by mental health and corrections.

ANALYSIS: All people who were between 18 and 22 years of age and were on the caseload of the Corrections Department during calendar year 1995 were selected from the Correctional Facilities Database. All individuals who were served by the Children's Services Programs during fiscal years 1991 through 1994 and would be in the 18 to 22 age group in 1995 were selected from the QSR data base. The number of people who had been clients of children's services programs and were involved in a correctional program during 1995 is the overlap of the two data sets.

Since the two data sets do not include a common person identifier, *Probabilistic Population Estimation* was used to determine the amount of caseload overlap. *Probabilistic Population Estimation* is a statistical procedure that uses knowledge of the distribution of dates-of-birth in the general population, in conjunction with the observed distribution of dates of birth in data sets, to determine the number of people represented in data sets that do not include unique person identifiers and to determine the number of people who are represented in multiple data sets that do not include unique person identifiers¹. All probabilistically determined population estimates are reported with 95% confidence intervals. In this analysis, the confidence intervals are wider than is frequently the case because of the relatively low numbers of individuals and the small number of birth cohorts under examination.

Whenever parameters derived by probabilistic population statistics are used in the discussion of findings, the point estimate is followed by the symbol ($\% \pm$) rather than including specific confidence intervals with every parameter. This convention was adopted to enhance the readability of the text. The precise confidence intervals, however, are included in the table on the second page of this document and are represented on the graphs of the results.

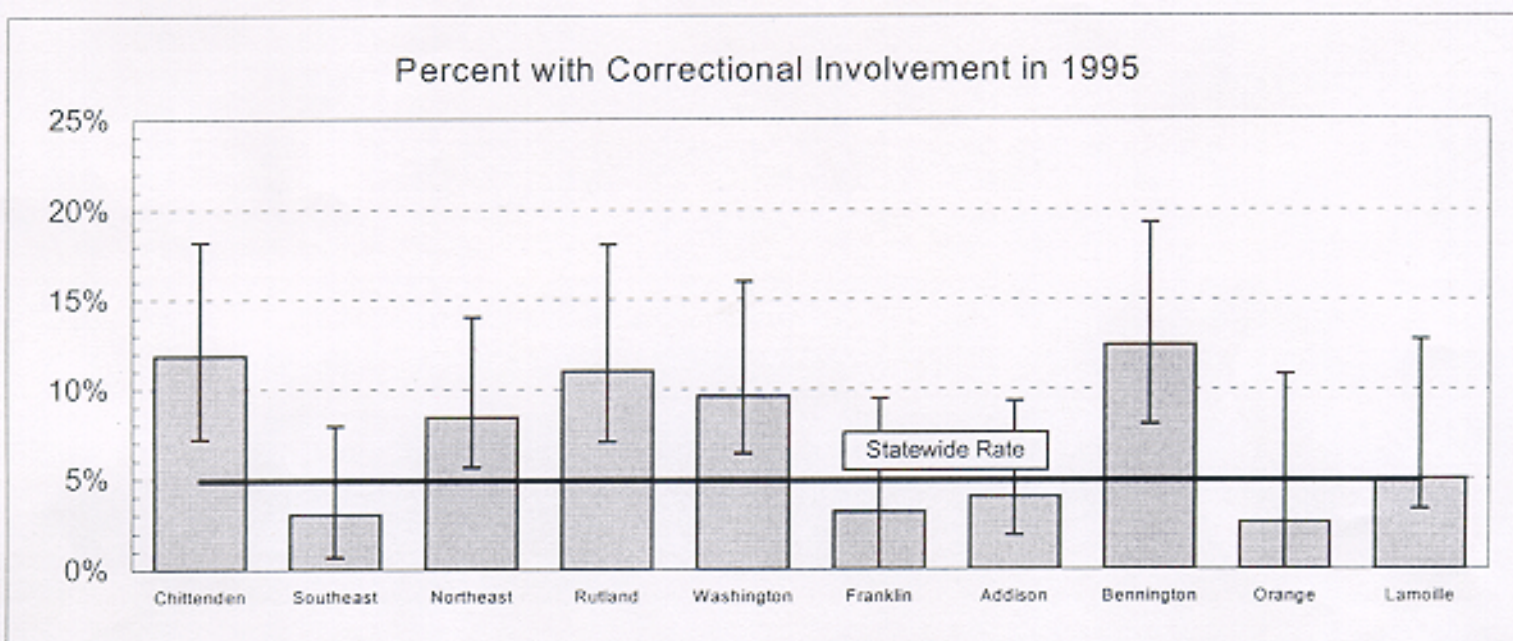
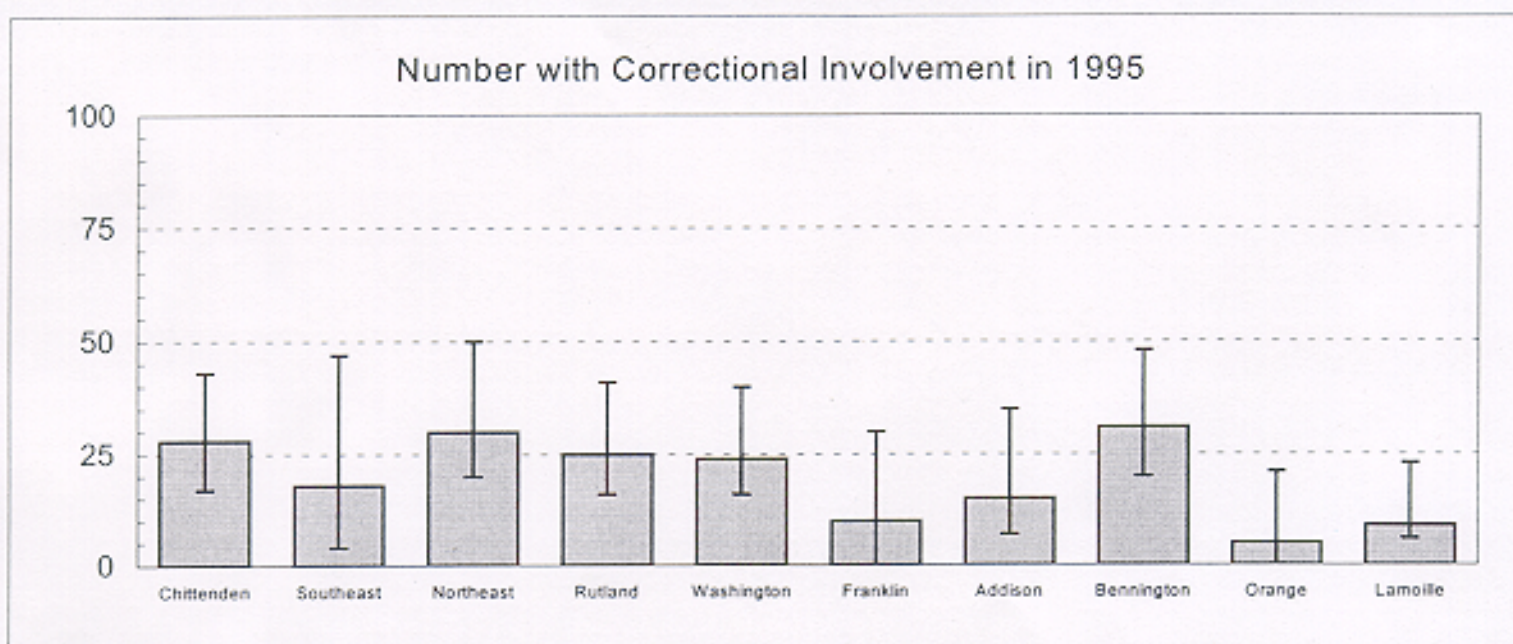
¹For more detail see Pandiani JA and Banks SM: A Global Measure of Access to Mental Health Services for a Managed Care Environment. The Journal of Mental Health Administration (24:3) summer, 1997, or Banks SM and Pandiani JA: The Utilization of State and General Hospitals for Inpatient Care. American Journal of Public Health, forthcoming.

RESULTS: Overall, 5%± of the children and adolescents who were served by Community Mental Health Children's Services Programs during FY91-94 and were in the 18-22 age group in 1995 were involved with the state correctional agency during 1995. The rate of correctional involvement for the general population in this age cohort is 1.5%±. Male clients of the community mental health programs had substantially higher correctional involvement than female clients (9% ± vs 2%±). The rates of correctional involvement for the general population in this age group are 2.4% for men and 0.2% for women.

There were substantial differences among Vermont's 10 community mental health service areas in the rates of correctional involvement for this age cohort. The Bennington (13%±), Chittenden (12%±), Rutland (11%±), Washington (10%±), and Northeast (9%±) service areas had significantly higher rates of correctional involvement when compared to the statewide rate (5%±).

NEXT QUESTIONS: It will be important to determine whether these rates of correctional involvement are stable characteristics of the community mental health programs or if they vary substantially from year to year. It is also important to consider differences in characteristics of the caseload of the various community programs before these measures are used to compare treatment outcomes across regions.

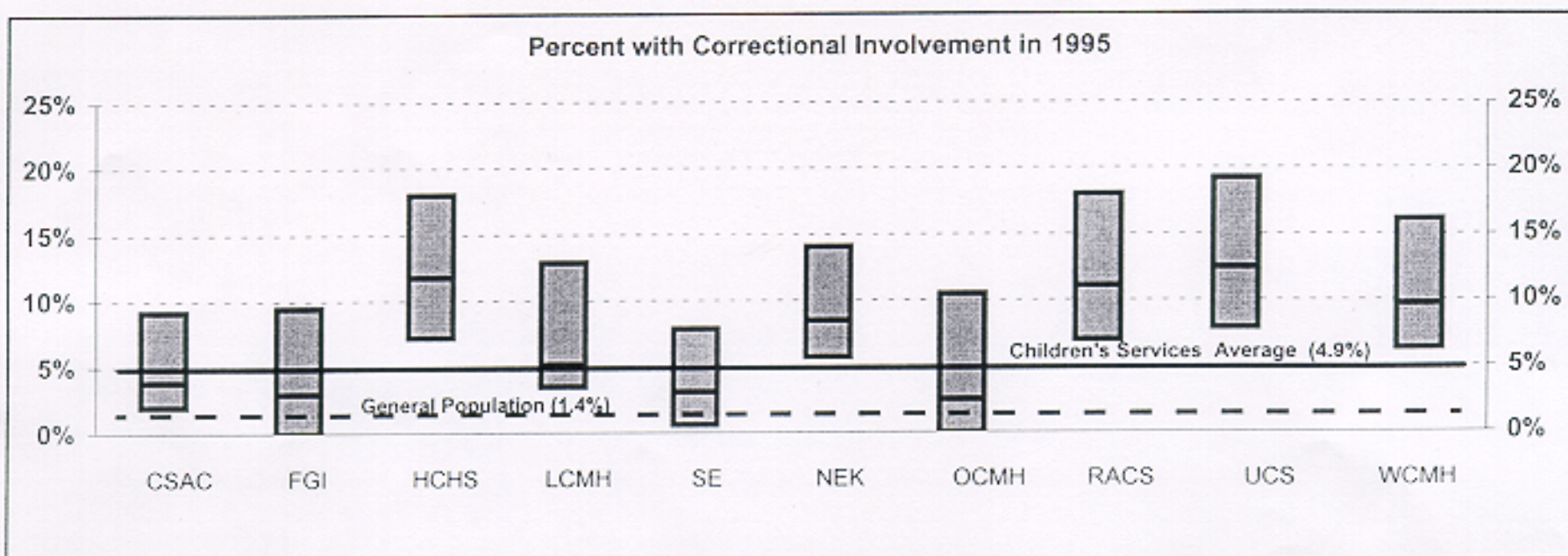
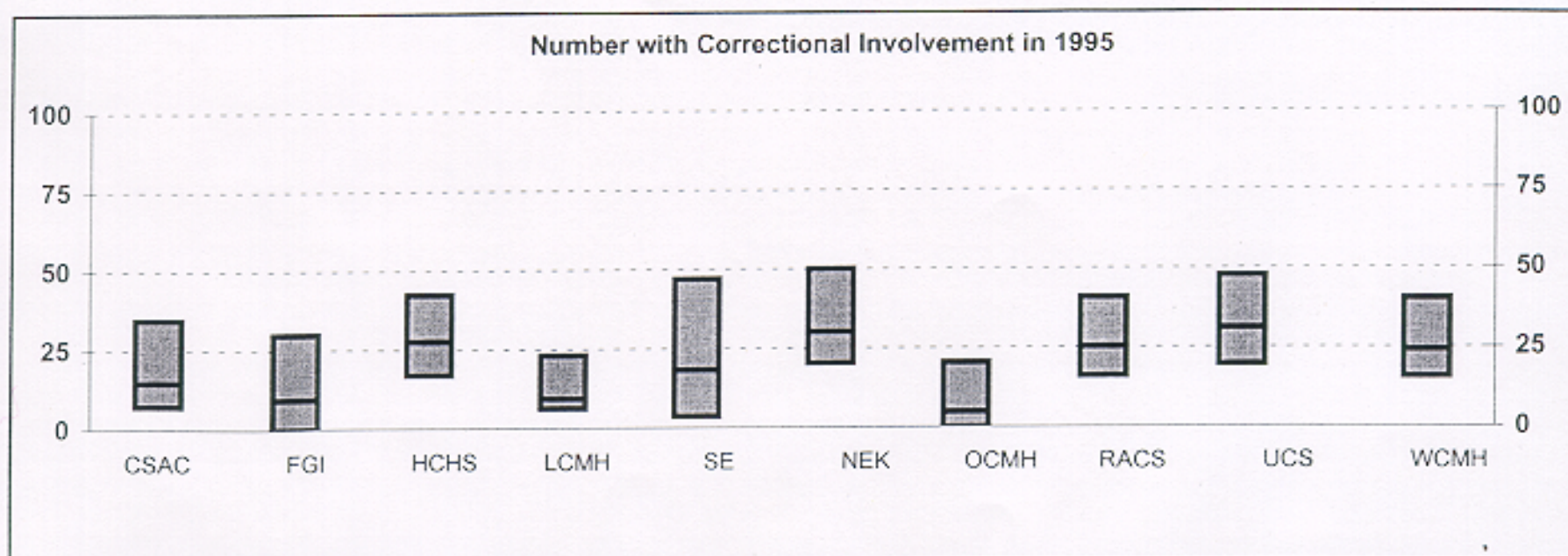
**1995 Correctional Involvement of FY1991-94 Children's Services Clients
(Aged 18 - 22 during 1995)**



Region	Children Services Programs ¹				
	Total Served During FY1991-94	Number Incarcerated with 95% Confidence Interval	Percent Incarcerated with 95% Confidence Interval		
Chittenden	236	28 17 - 43	12%	7 - 18%	
Southeast	593	18 4 - 47	3%	1 - 8%	
Northeast	356	30 20 - 50	8%	6 - 14%	
Rutland	227	25 16 - 41	11%	7 - 18%	
Washington	250	24 16 - 40	10%	6 - 16%	
Franklin	317	10 0 - 30	3%	0 - 9%	
Addison	375	15 7 - 35	4%	2 - 9%	
Bennington	249	31 20 - 48	12%	8 - 19%	
Orange	194	5 0 - 21	3%	0 - 11%	
Lamoille	180	9 6 - 23	5%	3 - 13%	
Total	2889 ± 81	142 96 - 213	5%	3 - 7%	

¹ Caseload overlap parameters are based on Probabilistic Population Estimation. Analysis includes people served by Children's Services Programs during FY1991 - FY1994 who were 18 to 22 years old in calendar year 1995.

1995 Correctional Involvement of FY1991-94 Children's Services Clients (Aged 18 - 22 During 1995)



	Total	Children's Services Program									
		CSAC	FGI	HCHS	LCMHS	SE	NEK	OCMHS	RACS	UCS	WCMHS
Total People (Age 18 - 22 During 1995) Served by Children's Services Programs During FY1991- FY1994	2,889 ± 81	375	317	236	180	593	356	194	227	249	250
# Incarcerated During Calendar 1995	142	15	10	28	9	18	30	5	25	31	24
95% Confidence Interval	96 - 213	7-35	0-30	17-43	6-23	4-47	20-50	0-21	16-41	20-48	16-40
% Incarcerated During Calendar 1995	5%	4%	3%	12%	5%	3%	9%	3%	11%	13%	10%
95% Confidence Interval	3 - 7%	2 - 9%	0 - 10%	7 - 18%	4 - 13%	.6 - 8	6 - 14%	0 - 11%	7 - 18%	8 - 19%	6 - 16%

Caseload overlap parameters are based on Probabilistic Population Estimation. The grey areas on the graphs indicate 95% confidence intervals, the black lines indicate point estimates. Analysis includes people served by Children's Services Programs during FY1991- FY1994 who were 18 - 22 years old in calendar 1995.

Correctional Involvement of Former Children's Services Clients

QUESTION: How many children and adolescents who are served by Children's Services Programs at Community Mental Health Centers in Vermont become involved with state correctional programs subsequent to treatment? Do the rates of correctional involvement for Children's Services clients vary among regions in the state?

METHOD: All people who were between 18 and 22 years of age and were on the caseload of the Corrections Department during calendar year 1995 were selected from the Correctional Facilities Database. All individuals who were served by the Children's Services Programs during fiscal years 1991 through 1994 and would be in the 18 to 22 age group in 1995 were selected from DDMHS databases. The number of people who had been clients of children's services programs and were involved in a correctional program during 1995 is the overlap of the two data sets.

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RESULTS: Overall, 5%± of the children and adolescents who were served by Community Mental Health Children's Services Programs during FY91-94 and were in the 18-22 age group in 1995 were involved with the state correctional agency during 1995. The rate of correctional involvement for the general population in this age cohort is 1.5%±. Male clients of the community mental health programs had substantially higher correctional involvement than female clients (9% ± vs 2%±). The rates of correctional involvement for the general population in this age groups are 2.4% for men and 0.2% for women.

There were substantial differences among Vermont's 10 community mental health service areas in the rates of correctional involvement for this age cohort.

<u>Program</u>	<u>Estimate</u>	<u>95% Confidence</u>	<u>Program</u>	<u>Estimate</u>	<u>95% Confidence</u>
Bennington	13%	8 – 19%	Lamoille	5%	4 – 13%
Chittenden	12%	7 – 18%	Addison	4%	2 - 9%
Rutland	11%	7 – 18%	Franklin/Grand Isle	3%	0 – 10%
Washington	10%	6 – 16%	Southeast	3%	.6 – 8%
Northeast	9%	6 – 14%	Orange	3%	0 – 11%

NEXT QUESTIONS: It will be important to determine whether these rates of correctional involvement are stable characteristics of the community mental health programs, or they vary substantially from year to year. It is also important to consider difference in characteristics of the caseload of the various community programs before these measures are used to compare treatment outcomes across regions.

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